## The Five Core Questions of Advanced Asset Management And

## Associated Techniques and Output

Core Questions	Associated Techniques/Output
<ul> <li>1. What is the current state of my assets?</li> <li>• What do I own?</li> <li>• Where is it?</li> <li>• What condition is it in?</li> <li>• What is its remaining useful life?</li> <li>• What is its economic value?</li> </ul>	<ul> <li>Asset registry/inventory</li> <li>Data standards, asset hierarchy</li> <li>System maps</li> <li>Delphi approach to locating other sources of data</li> <li>Process diagrams</li> <li>"Handover" procedures</li> <li>Condition analysis</li> <li>Condition rating</li> <li>Valuation techniques</li> <li>Optimized renewal / replacement cost tables</li> </ul>
2. What is my required sustained Level Of Service?	<ul> <li>Customer demand analysis</li> <li>Regulatory requirements analysis</li> <li>Level of service statements; LOS "roll-up" hierarchy</li> <li>"Balanced scorecard"</li> <li>Asset functionality statements</li> <li>AM Charter</li> </ul>
<ul> <li>3. Which of my assets are critical to sustained performance?</li> <li>How do my assets fail? How can they fail?</li> <li>What is the likelihood of failure?</li> <li>What does it cost to repair?</li> <li>What are the consequences of failure?</li> </ul>	<ul> <li>Failure analysis ("root cause" analysis; failure mode, effects and criticality analysis; reliability-centered analysis)</li> <li>Risk/consequence analysis</li> <li>Asset list by criticality code</li> <li>Failure codes</li> <li>Probability of failure</li> <li>Business risk exposure</li> <li>Asset functionality statements</li> <li>Asset "decay curves"</li> <li>Asset-unit level management plans and guidelines</li> <li>Asset knowledge</li> </ul>
4. What are my best minimum life-cycle - cost CIP and O&M strategies?  • What alternative treatment options exist?  • Which are most feasible?	<ul> <li>Optimal renewal decision-making</li> <li>Life-cycle costing</li> <li>CIP development and validation</li> <li>Condition-based monitoring plans and deployment</li> <li>Failure response plans</li> <li>Capital "cost compression" strategies</li> <li>Operating "cost compression" strategies</li> </ul>
5. Given the above, what is my best long-term funding strategy?	<ul> <li>Over-arching financial impact analysis</li> <li>Optimized financial strategy</li> <li>Total Asset Management Plan</li> <li>Telling the story with confidence</li> </ul>
Deployment of AAM	<ul> <li>Best practices/best appropriate practices</li> <li>Gap analysis and visioning</li> <li>Enterprise asset management system (EAMS)</li> <li>Change management</li> <li>Side-by-side mentoring</li> <li>AM University</li> <li>Knowledge management system</li> </ul>